A significant range extension for the northern Australian gecko *Strophurus taeniatus*

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Introduction

The distribution and habitat associations of many northern Australian fauna are still poorly known. Predicted distributions in field guides often rely on museum collections coupled with an assessment of biogeographic and bioregional affiliations (Wilson 2005). In north-eastern Queensland, regions such as the Gulf Plains and Mitchell Grass Downs are thought to be significant barriers between eastern and western fauna species and subspecies (Schodde and Mason 1999). However there is a steady smattering of records of arid and inland species occurring much further east than anticipated (Kutt 2003). In this short note we report another bridging of this Mitchell Grass/Gulf Plain divide; in this case the known range of the gecko *Strophurus taeniatus* is extended east by 360 km into the edge of the Einasleigh Uplands bioregion.

Study area and methods

Gilberton Station (approximately 19º16'S; 143º40'E, hereafter referred to as Gilberton) is 330 km due W of Townsville on the Gilbert River, north Queensland. The roughly 34,000 ha property is on the boundary of the Einasleigh Uplands and Gulf Plains bioregions, with approximately 96% of the area falling within the Einasleigh Uplands (Figure 1).

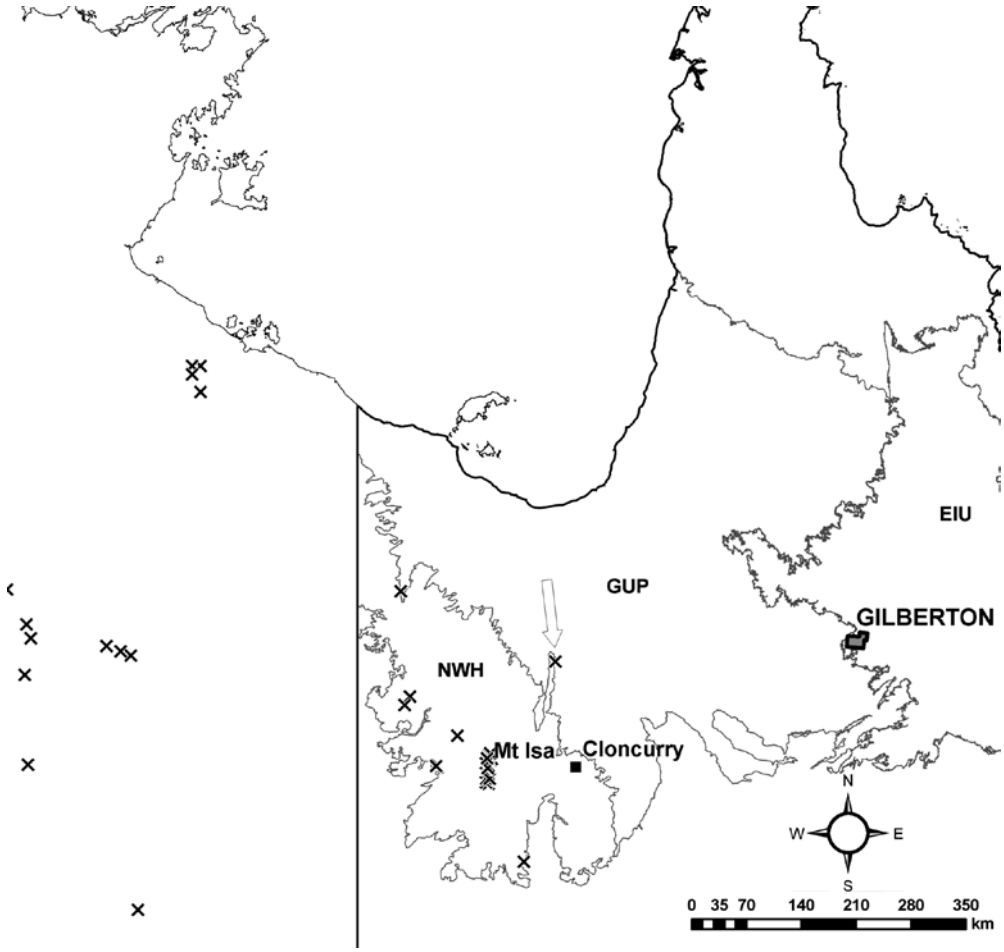

Figure 1. Map indicating location of Gilberton Station relative to previously known ***Strophurus taeniatus*** (x). Open arrow indicates closest known record to Gilberton. NWH = Northwest Highlands bioregion; GUP = Gulf Plains; EIU = Einasleigh Uplands.

In October 2008, 32 standardised fauna monitoring sites were established on Gilberton as part of ongoing surveys across the Einasleigh Uplands and Gulf Plains. Each site utilised an array of survey techniques including pitfall, funnel, Elliott and cage traps as well as active search techniques including spotlighting at night (see Kutt and Woinarski 2007 for a description). Basic habitat data including soil description, dominant plant species, basal area and other floristic measures were also taken following methods outlined in Eyre *et al*. (2006).

To determine known range of *Strophurus taeniatus*, relevant texts (Cogger 2000, Wilson and Swan 2008; Wilson 2005) were consulted and database searches of all relevant herpetology collections from Australian museums were conducted. In addition, specimen records were downloaded from the OzCam (http://www.ozcam.gov.au/cgi-bin/emu-dataportal.cgi) website on 10 November 2009 (searches under *Diplodactylus taeniatus* and *Strophurus taeniatus*). Locations of the nearest previous specimens of *S. taeniatus* are presented in Fig. 1.

Results and discussion

A single *S. taeniatus* was collected from a pitfall trap on 17th October 2008 from open *Eucalyptus crebra*, *E. persistens*, *Corymbia pocillum*, *Melaleuca citrolens* and *Acacia shirleyi* woodland on stony lateritic soil with spinifex (*Triodia* sp.) dominated ground cover. The location was 19º14'S, 143º39'E (GDA94). This specimen is lodged at the Queensland Museum (QMJ88151; Fig. 2). A second individual was seen, but not collected, on the night of 17th October 2008 at 19º13'S, 143º39'E (GDA94). This individual looked identical to QMJ88151. Habitat at this location is open *Eucalyptus crebra*, *E. normantonensis*, *E. persistens* and *Acacia shirleyi* woodland on a lateritic escarpment with spinifex (*Triodia* sp.) dominated ground cover.

The records presented here further highlight a number of important but oft-repeated facets of survey and inventory monitoring; basic distribution information for some Queensland vertebrate species is still lacking; single surveys are often a snapshot of what species might be present in an area and a thorough inventory of any area requires repeated surveys over multiple years; and our current understanding of biogeographic affinity of species and regions is possibly not as well-formed as we might like to think.

Figure 2. *Strophurus taeniatus* (QMJ88151) collected from Gilberton, N Qld.

Acknowledgements

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